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## 4. Two New Species of *Tiphia* from the West Indies (Hymenoptera: Tiphiidae) [1]

*By* HARRY W. ALLEN [2]

The two wasps described below were collected recently on Dominica by Dr. H. E. Evans of the Harvard University Museum of Comparative Zoology and by Dr. W. W. Wirth of the U.S. Department of Agriculture as participants of the survey of that island by the Smithsonian Institution.

### *Tiphia dominicae*, new species

FIGURE 1

This species differs from species of the North American mainland in having the second sternum perceptibly keeled. From other West

[1] Other faunal studies in this series are: 1, Kier, Proc. U.S. Nat. Mus., 1966, vol. 121, no. 3577, pp. 1–9; 2, Stone, ibid., 1966, vol. 121, no. 3578, pp. 1–6; 3, Kirstener, ibid., 1967, vol. 123, no. 3610, pp. 1–6. A companion series on the flora appears in the "Contributions of the United States National Herbarium."

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Indian species that have been described the male may be distinguished by the sparse hairiness and narrowness of the cheek, and the relative shortness of the posterior section of the second cubital cell.

MALE.—Front with primary punctures ranging from contiguous above base of antennae to third-degree density in area lateral to ocelli; numerous minute punctures on lower half extending on sides into upper half. Antenna long and slender. Cheek (fig. 1A) much narrower than diameter of an antennal fossa; sparsely hairy. Clypeal extension usually bidentate. Mandible frequently with a small preapical cusp. Head width 2.72 least distance between eyes (four measured were 2.9, 2.65, 2.6, 2.75).

Dorsum of pronotum with high, sharp transverse carina; punctures small, evenly distributed, of third-degree density. Lateral pronotum with a low, rounded anterior process; disc flat, microscopically aciculate, without groove across its middle. Mesopleuron not any-

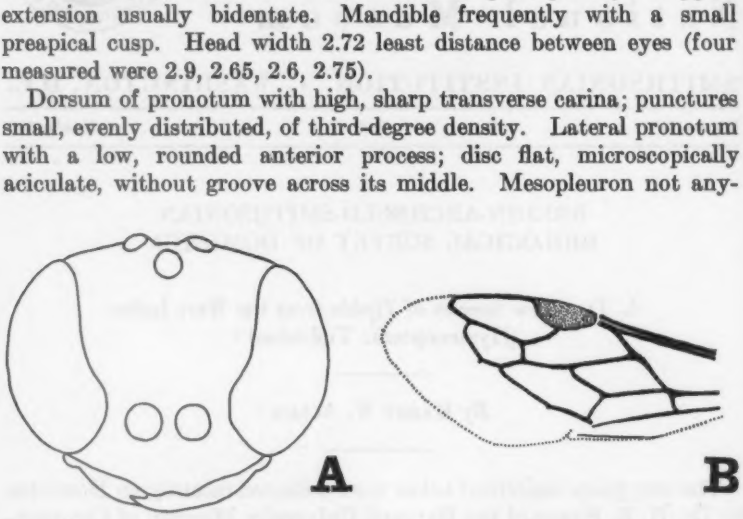


FIGURE 1.—*Tiphia dominicae*, new species: A, outline of head; B, forewing.

where masked under fine appressed hairs; primary punctures small, usually separated by several times their average diameter; minute punctures more numerous than primaries only on upper half and along posterior slope. Hind tibia on inside with a naked longitudinal streak that is moderately ridged on apical half; sensorium obscure. Tegula black, opaque, glossy, without marginal groove. Forewing (fig. 1B) strongly infumated; stigma nearly twice as long as wide; radial cell greatly exceeds second cubital cell in lateral extension; second cubital cell with its anterior section much longer than the posterior (average of four defined in ratios of the first intercubital, listed clockwise: 1.0, 2.5, 1.85, 1.9).

Dorsum of propodeum smooth, polished; areola with slightly concave sides and broadly truncate apex, twice as long as apical width or slightly less. Tergum 1 without a transverse carina, or at most with an irregular poorly developed one in center of segment; preapical

band of fine, discrete punctures in a moderate depression, and at middle about two punctures wide. Intermediate terga glossy; hairs short and sparse; punctures variable but usually very small and widely separated; without apical rows of microscopic punctures or gouges. Sternum 2 with a perceptible median callosity or keel.

Length 6 to 9 mm.

FEMALE.—Unknown.

HOLOTYPE.—♂; Dleau Gommier, Dominica, 1400 ft.; 16–II–65, H. E. Evans; U.S. National Museum.

PARATYPES.—Collected by H. E. Evans on Dominica in 1965: Dleau Gommier, 1400 ft.; 10 ♂♂ on 15–II and 6 ♂♂ on 2–III. Two miles south of mouth, Layou River; 4 ♂♂ on 13–II and 6 ♂♂ on 5–III. Pond Figues R., 400 ft.; 4 ♂♂ on 9–II and 1 ♂ on 9–III. South of Chiltern, 1600 ft.; 4 ♂♂ on 19–II. Freshwater L., 2500 ft.; 3 ♂♂ on 6–III. Roseau; 1 ♂ on 8–III. Clarke Hall, Layou Vall.; 1 ♂ on 10/17–II.

Collected by W. W. Wirth in 1965: d'Leau Gommier; 1 ♂ on 16–III. South of Chiltern Est.; 2 ♂♂ on 2–II. South of Chiltern Est.; 1 ♂ on 20–II.

***Tiphia layouae*, new species**

*Tiphia layouae* differs from *T. dominica* in having a distinctly wider cheek and a well-defined transverse carina, complete across the dorsum of the first tergum.

MALE.—Differs from the description of the male of *T. dominica* as follows: The secondary punctures of the front are usually confined to a smaller area. The cheek is wider and almost as wide as the antennal fossa. The head width is 2.25 times the least distance between the eyes (four measured were 2.3, 2.3, 2.2, 2.2). The discal punctures of the mesopleuron average slightly coarser. The sections of the second cubital cell defined in ratios of the first intercubital vein and listed clockwise (average of 4) are 1.0, 2.44, 1.76, 1.89 and are almost identical with the cubital cell ratios of *T. dominica*. Tergum 1 with a well-defined transverse carina extending entirely across dorsum.

Length 5 to 8 mm.

FEMALE.—Unknown.

HOLOTYPE.—♂; Clarke Hall, Layou Valley, Dominica; 10/17–II–65, H. E. Evans; U.S. National Museum.

PARATYPES.—Collected by H. E. Evans on Dominica in 1965: Clarke Hall, Layou Valley; 2 ♂♂ on 10/17–II, 2 ♂♂ on 20/28–II, 2 ♂♂ on 3/13–III. Pond Figues R., 400 ft.; 3 ♂♂ on 9–II.

Collected by W. W. Wirth in 1965: Pond Figues R.; 1 ♂ on 25–I. Hillsborough Est.; 1 ♂ on 15–III. Clarke Hall, "malaise trap"; 1 ♂ on 8/10–I. 12 ♂♂; Clarke Hall, "malaise trap"; 12 ♂♂ on

21/31–III. Clarke Hall, "malaise trap"; 5 ♂♂ on 11/20–II. Clarke Hall; 1 ♂ on 1/10–III.

Collected by P. J. Spangler in 1964: Clarke Hall; 1 ♂ on 12/17–XI. South Chiltern; 2 ♂♂ on 8/12–XII.

Collected by G. Steyskal in 1966: Clarke Hall Est.; 1 ♂ on 11–V.

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